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| 10/690,422 | 10/21/2003 | Nancy Pettigrew | 315547.01 | 3824 |
| 22971 7590 05/30/2008 MICROSOFT CORPORATION ONE MICROSOFT WAY REDMOND, WA 98052-6399 | | | | |
| EXAMINER | | | | |
| FORD, GRANT M | | | | |
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| 2141 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/690,422

Applicant(s)

PETTIGREW ET AL.

Examiner

GRANT FORD

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments filed 5/2/2008 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hart, as outlined below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 34-35, 39-40, 44-59, and 62-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shipp (US 2004/0093384) in view of Hart (US 2002/0116463) and further in view of McCormick et al. (US 6,421,709).

a. As per claim 34, Shipp discloses spam analysis comprising:
spam rules having attributes including a score (Para. 0080, 0101); and
a spam analyzer operable to process a log file received from a message switch and operable to update the attributes of at least one of the plurality of spam rules, the updating based on information derived from the log file (Para. 0014, 0028-0030, 0035). However, while the prior art of Shipp discloses the implementation of spam rules it fails to explicitly disclose a database including a plurality of spam rules, and select rules file being transmitted to a message switch.

Hart teaches a database including a plurality of spam rules (Abstract, Para. 0034). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of a central database for storing spam rules with the prior art spam filtering of Shipp. One of ordinary skill in the art would have done so for the purpose of establishing a central source for filter rule data for use in a distributed network spam filtering method (Abstract, Para. 0034).

McCormick teaches a select rules file including one or more select rules of the plurality of spam rules, each of the one or more select rules being included in the select rules file based on its attributes, the select rules file being transmitted to the message switch (Col. 12 lines 18-38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of sending selected rules to a message switch with the score-based antispam system of Shipp. One of ordinary skill in the art would have done so for the purpose of replicating collaborative filter data across an enterprise (Col. 12 lines 30-38).

b. As per claim 35, Shipp additionally discloses wherein the spam analyzer processes the log file to determine how many times each of the plurality of spam rules was hit and accordingly updates the attributes corresponding to the each of the plurality of spam rules (Para. 0027-0035, 0080, 0094-0099).

c. As per claim 39, Shipp, Hart, and McCormick teach the invention substantially as claimed above. However, Shipp fails to explicitly disclose the use of select rules files.

McCormick teaches wherein the select rules file further includes one or more new rules (Abstract, Col. 12 lines 18-45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of sending selected rules to a message switch with the score-based antispam system of Shipp. One of ordinary skill in the art would have done so for the purpose of replicating collaborative filter data across an enterprise (Col. 12 lines 30-38).

d. As per claim 40, Shipp additionally discloses wherein the spam analyzer calculates based on a log file, how many times each of the plurality of spam rules was hit (Para. 0027-0035, 0080, 0094-0099).

e. As per claims 44 and 63, Shipp, Hart, and McCormick teach the invention substantially as claimed above. Shipp additionally discloses scoring of spam rules (Para. 0065, 0080, 0101). However, Shipp fails to explicitly disclose the manual modification of spam rules.

McCormick teaches a filter administration tool for adding, removing, or updating spam rules (Col. 12 lines 45-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of manually modified spam rules with the spam filtering system of Shipp. One of ordinary skill in the art would have done so for the purpose of permitting customer-based local modification of spam rules for a given enterprise (Col. 12 lines 45-60).

f. As per claim 45, Shipp discloses a message switch including a spam filter operable to receive an email message (Para. 0028-0030, 0080, 0101); and

a select rules file including a plurality of spam rules usable by the spam filter to analyze the email message and to determine if the email message is a spam email message or a non-spam email message wherein the analyzing includes creating an entry for the email message in a log file, the entry including information corresponding to the email message and transmitting contents of a log file to a central location (Para. 0014,0028-0030, 0035). However, Shipp fails to explicitly disclose a select rules file being transmitted to a message switch.

Hart teaches a select rules file including a plurality of spam rules usable by the spam filter to analyze an e-mail message (Para. 0041-0043, 0045-0046). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of a select rules file including spam rules with the prior art spam filtering of Shipp. One of ordinary skill in the art would have done so for the purpose of utilizing a global and a local spam ruleset, wherein the global ruleset is modified based upon changes to a local spam ruleset at a message switch (Para. 0043,0045-0046).

McCormick teaches receiving an updated select rules file from a central server, the updated select rules file differing from the select rules file, and the updated select rules file becoming the select rules file once received (Col. 12 lines 18-38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of updating a selected rules file with the score-based antispam system of Shipp. One of ordinary skill in the art would have done so for the purpose of replicating collaborative filter data across an enterprise (Col. 12 lines 30-38).

g. As per claim 46, Shipp additionally discloses wherein a score is associated with each spam rule (Para. 0065,0080,0101).

h. As per claim 47, Shipp additionally discloses wherein a total spam score of the email message is calculated using the score of each of the plurality of spam rules for which there is a hit on the email message (Para. 0080,0085-0092,0101).

i. As per claim 48, Shipp additionally discloses wherein if the total score exceeds a score threshold, the email message is identified as a spam message (Para. 0080, 0085-0092,0101).

j. As per claim 49, Shipp additionally discloses wherein each of the spam rules has attributes including one or more of a score, a date and time the rule was last updated, number of hits, number of spam hits, number of non-spam hits, and data and time of last hit (Para. 0080,0085,0101).

k. As per claim 50, Shipp additionally discloses wherein if the total score does not exceed a score threshold, the message is identified as a non-spam message (Para. 0080).

l. As per claims 51 and 65, Shipp additionally discloses wherein the message is transferred to an intended recipient if the message is determined to be non-spam (Para. 0033).

m. As per claim 52, Shipp discloses wherein each of the plurality of rules are constructed using regular expressions (Para. 0044-0056, 0086-0093).

n. As per claims 53 and 66, Shipp discloses receiving an email message at a message switch (Para. 0009,0012);

processing the email message against spam rules to determine if the email message is a spam message or a non-spam message (Para. 0009);

creating a spam information entry corresponding to the email message in a log file (Para. 0094);

calculating statistics for the spam rules based on information in the log file (Para. 0101);

updating a database of spam rules based on the statistics (Para. 0100-0101); and

selecting a set of select rules from the database to form a select rules set (Para. 0100-0101, 0124). However, the prior art of Shipp fails to explicitly disclose updating a database of spam rules based on statistics and replication of a select rules set to a message switch.

Hart teaches updating a database including a plurality of spam rules and selecting a set of select rules from the database to form a select rules set (Abstract, Para. 0034, 0041-0043, 0045-0046). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of a central database for storing spam rules with the prior art spam filtering of Shipp. One of ordinary skill in the art would have done so for the purpose of establishing a central source for filter rule data for use in a distributed network spam filtering method (Abstract, Para. 0034).

McCormick teaches replicating a select rules set to a message switch where the received select rules become the spam rules (Col. 12 lines 18-38). It would

have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of sending selected rules to a message switch with the score-based antispam system of Shipp. One of ordinary skill in the art would have done so for the purpose of replicating collaborative filter data across an enterprise (Col. 12 lines 30-38).

o. As per claim 54, Shipp, Hart, and McCormick teach the invention substantially as claimed above. However, Shipp fails to explicitly disclose a plurality of message switches each operating on a server as part of a distributed network.

McCormick teaches a plurality of message switches each operating on a server as part of a distributed network (Col 12 lines 13-38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of replication of spam rules across a plurality of message switches operating as part of a distributed network with the score-based antispam system of Shipp. One of ordinary skill in the art would have done so for the purpose of providing collaborative email filtering across multiple enterprise environments utilizing relational databases (Col 12 lines 13-38).

p. As per claim 55, Shipp additionally discloses wherein each of the spam rules has a score (Para. 0080).

q. As per claim 56, Shipp additionally discloses wherein a total spam score of the email message is calculated using the score of each of the plurality of spam rules for which there is a hit on the email message (Para. 0080,0085-0092,0101).

r. As per claim 57, Shipp additionally discloses wherein the spam entry corresponding to the email message in the log file includes an identifier for each of the spam rules for which there was a hit (Para. 0085-0094).

s. As per claim 58, Shipp additionally discloses calculating based on a log file, how many times each of the plurality of spam rules was hit (Para. 0027-0035, 0080, 0094-0099).

t. As per claim 59, Shipp additionally discloses wherein the calculating includes calculating how many hits were for a spam message as opposed to a non-spam message (Para. 0080,0085-0093).

u. As per claim 62, Shipp discloses wherein the updating includes updating the score of one or more of the spam rules based on the statistics (Para. 0085-0101).

v. As per claim 64, Shipp, Hart, and McCormick teach the invention substantially as claimed above. However, the prior art of Shipp fails to explicitly disclose replication of a select rules set to a plurality of message switches.

McCormick teaches replicating a select rules set to a plurality of message switch where the received select rules become the spam rules (Col. 12 lines 18-38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of sending selected rules to a message switch with the score-based antispam system of Shipp. One of ordinary skill in the art would have done so for the purpose of replicating collaborative filter data across an enterprise (Col. 12 lines 30-38).

4. Claims 36, 41-43, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shipp, Hart, and McCormick in view of Pantel et al. (SpamCop: A Spam Classification & Organization Program), hereinafter referred to as SpamCop.

a. As per claims 36,41, and 60, Shipp, Hart, and McCormick teach the invention substantially as claimed above. However, Shipp fails to explicitly disclose the use of tracking how many times spam rules were false-positive hits.

SpamCop teaches the use of counting the number of false-positive hits and calculating a false positive rate based on the results (Page 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of tracking false-positive hit rates with spam filters. One of ordinary skill in the art would have done so for the purpose of measuring the effectiveness of a rule or filter and making any changes necessary for optimization, based on the results (Page 5).

b. As per claim 42, Shipp, Hart, and McCormick teach the invention substantially as claimed above. Additionally, Shipp discloses utilizing a log file associated with spam rules (Para. 0027-0035, 0080, 0094-0099). However, Shipp fails to explicitly disclose the use of tracking how many times spam rules were spam hits.

SpamCop teaches the use of counting the number of spam hits and calculating a rate based on the results (Pages 4-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of tracking false-positive hit rates with spam filters. One of ordinary skill in the art would

have done so for the purpose of measuring the effectiveness of a rule or filter and making any changes necessary for optimization, based on the results (Pages 4-5).

c. As per claim 43, Shipp, Hart, and McCormick teach the invention substantially as claimed above. Additionally, Shipp discloses utilizing a log file associated with spam rules (Para. 0027-0035, 0080, 0094-0099). However, Shipp fails to explicitly disclose the use of tracking how many times spam rules were non-spam hits.

SpamCop teaches the use of counting the number of non-spam hits and calculating a rate based on the results (Pages 4-5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of tracking non-spam hit rates with spam filters. One of ordinary skill in the art would have done so for the purpose of measuring the effectiveness of a rule or filter and making any changes necessary for optimization, based on the results (Pages 4-5).

5. Claims 37-38 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shipp, Hart, and McCormick in view of Katsikas (US 6,868,498).

a. As per claims 37 and 61, Shipp, Hart, and McCormick teach the invention substantially as claimed above. However, Shipp fails to explicitly disclose retiring rules based on its attributes.

Katsikas teaches wherein one or more rules of the spam rules are retired based on its attributes (Figure 9, Col 5 lines 29-67, Col 10 lines 6-28). It would have

been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of retiring spam rules with the spam filtering system of Shipp. One of ordinary skill in the art would have done so for the purpose of implementing expiration timers associated with dynamic spam classification rules (Col 5 lines 29-67).

b. As per claim 38, Shipp, Hart, and McCormick teach the invention substantially as claimed above. However, Shipp fails to explicitly disclose retiring rules.

Katsikas teaches the use of a predetermined amount of time associated with spam rules (Figure 9, Col 5 lines 29-67, Col 10 lines 6-28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of retiring spam rules with the spam filtering system of Shipp. One of ordinary skill in the art would have done so for the purpose of implementing expiration timers associated with dynamic spam classification rules (Col 5 lines 29-67).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GRANT FORD whose telephone number is (571)272-8630. The examiner can normally be reached on 8-5:30 Mon-Thurs alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2142

gmf

/Grant Ford/

Examiner, Art Unit 2141

/Andrew Caldwell/

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